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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,612	05/30/2001	Kwell Hung	MR1957-543	5551
4586	7590	03/07/2005	EXAMINER	
ROSENBERG, KLEIN & LEE			SIANGCHIN, KEVIN	
3458 ELLICOTT CENTER DRIVE-SUITE 101			ART UNIT	
ELLICOTT CITY, MD 21043			PAPER NUMBER	

2623

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/866,612

Applicant(s)

HUNG ET AL.

Examiner

Kevin Siangchin

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/30/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### Detailed Action

#### *Electrion/Restricion*

1. Applicant's election without traverse of *Species One* (Claim 2, and generic claims 1 and 6-8) in the reply filed on the 6<sup>th</sup> of June 2004 is acknowledged. Claims 3-5 have been withdrawn from consideration. Claims 1-2 and 6-8 are now pending.

#### *Drawings*

#### Objections

2. The Applicant's amendments to the Specification overcome all prior objections to the Drawings. The current drawings are acceptable.

#### *Specification*

#### Response to Amendments

3. The Applicant has amended the Specification to correct the incorrect reference numbers cited in the previous Office Action. No new matter has been introduced.

#### *Claims*

#### Rejections Under 35 U.S.C. § 102(b)

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 6 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by [Tuli99] (R. Tuli, *U.S. Patent 5,942,761: Enhancement Methods And Devices For Reading A Fingerprint Image*, Filing Date: June 1995).

6. *The following is in regard to Claim 1.* [Tuli99] discloses a fingerprint identification apparatus (i.e., a “fingerprint reading modular device capable of extracting and accurately reproducing and enhancing the ridge pattern on the skin of a fingertip is provided” – e.g., [Tuli99] Abstract, sentence 1 and Figs. 1-2 and 14). The apparatus comprises:

- (1.a.) A contact image sensor (CIS) module (i.e. the Selfoc lens array 6 and solid state sensor 7 – cf. [Tuli99] Figs. 1-2).
- (1.b.) A keyswitch (i.e. plate 5 - [Tuli99] Fig. 1) having:
  - 1. Transparent plate for finger-tactility (cf. [Tuli99], *Detailed Description Of Preferred Embodiments*, sentence 2). Notice, in [Tuli99] Fig. 1, that the finger touches the transparent platen 5. The plate, therefore, has “finger-tactility”.
  - 2. Relative movement with respect to the CIS module (cf. [Tuli99], *Background Of The Invention*, ¶ 1, sentence 3; also note operation of the device depicted in Figs. 1-2).
- (1.c.) A restoring means (i.e. spring system 9 – cf. [Tuli99] Figs. 1-2) arranged on the keyswitch (i.e. fastened to the housing 1 and the glass or transparent platen 5 – cf. [Tuli99] column 5, lines 40-42 and Fig. 1) and to provide restoring force to the keyswitch (cf. [Tuli99] column 5, lines 40-45 and lines 56-60; the restoring force should also be apparent upon inspection of [Tuli99] Figs. 1-2).

7. *The following is in regard to Claim 2.* Notice, in [Tuli99] Figs. 1-2, that:

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- (2.a.) The CIS module (i.e. the Selfoc lens array 6 and solid state sensor 7) is fixedly arranged (i.e. mounted to the internal housing (e.g. housing 1 in Figs. 1-2) – cf. [Tuli99], *Background Of The Invention*, ¶ 1, sentence 3).
- (2.b.) The keyswitch is slidably fit on the base (cf. [Tuli99] column 5, lines 42-43; this arrangement is also apparent from Figs. 1-2).

8. *The following is in regard to Claim 6.* In the device depicted in [Tuli99] Fig. 1, the keyswitch (platen 5) is wholly composed of a transparent plate (cf. [Tuli99], column 5, line 16).

9. *The following is in regard to Claim 8.* Clearly, the spring 9 (restoring means) of [Tuli99] is – as springs generally are – made of a resilient material.

Rejections Under 35 U.S.C. § 103(a)

10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over [Tuli99], in view of [Massimo01] (J. Massimo, *U.S. Patent 6,260,885: Latent Fingerprint Lifting And Recordation Device*, Filing Date: September 2000).

12. *The following is in regard to Claim 7.* The transparent platen 5 of [Tuli99] lacks:

(7.a.) A scale ruler to measure the fingerprint size.

13. [Massimo01] discloses a latent fingerprint recordation device ([Massimo01] Fig. 2) comprising:

(7.a.) Scale rulers (i.e. distance scales 26 and 28 – cf. [Massimo01] Fig. 2) to measure the fingerprint size (cf. [Massimo01], *Detailed Description Of The Invention*, ¶ 3).

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Generally speaking, [Massimo01] teaches that the overall size of a fingerprint is a property worthy of assessment, and, moreover, that such an assessment could be conveniently achieved through the use of rulers, such as distance scales 26 and 28.

14. It would have been obvious to one of ordinary skill in the art, at the time of the Applicant's claimed invention, to modify the fingerprint identification apparatus of [Tuli99] to include rulers in order to measure the overall size of the fingerprint. As suggested in [Massimo01] (cf. [Massimo01], *Detailed Description Of The Invention*, ¶ 3), rulers would provide a convenient means for assessing the overall size of the fingerprint. Since the platen is the only surface on the apparatus with which the fingerprint makes contact, the only logical surface on the fingerprint apparatus, to incorporate the ruler into would, be that of the platen. Therefore, it would have been obvious to integrate such rulers on the platen of the apparatus.

15. [Massimo01] and [Tuli99] both disclose devices for recording fingerprints – albeit via divergent modes of capture. Though substantial structural differences exist between [Massimo01] and [Tuli99], they do not diminish the applicability of [Massimo01] to the device discloses in [Tuli99]. [Massimo01] is not relied upon for the manner in which the fingerprint is captured, but rather for its suggestion that the overall size of a fingerprint commends measurement and, moreover, that such a measurement could be conveniently achieved using devices such as rulers.

16. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See, e.g., *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) and *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Second, there must be a reasonable expectation of success. See, e.g., *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See, e.g., *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)

17. The teachings of [Massimo01] were shown above to provide adequate motivation for one of ordinary skill in the art to combine [Tuli99] and [Massimo01]. Again, [Massimo01] suggests that the overall size of a fingerprint is a property worthy of assessment, and, moreover, that such an assessment could be conveniently achieved through the use of rulers. In performing the modification proposed above, the specific placement of these rulers upon the

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platen would have been apparent to one of ordinary skill in the art, though no explicit teaching to do so is found in either of these reference. (cf. *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000): "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art").

18. As to the reasonable expectation of success, notice that a judicious placement of the ruler on the platen, as suggested above, would not, in any substantial way, perturb the function or innate structure of the fingerprint authentication device of [Tuli99]. Indeed, such modification would be trivial to a skilled artisan, and could be successfully implemented with minimal experimentation. The resulting fingerprint apparatus would satisfy all limitations of Claim 7.

#### *Citation of Relevant Prior Art*

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

20. Prior Art devices having similar structure and/or functionality to the Applicant's claimed invention:

[Johnson71] J. Johnson, *U.S. Patent 3,619,060: Identification Device*. Filing Date: November 1968.

[Fujimoto93] Y. Fujimoto et al., *U.S. Patent 5,177,802: Fingerprint Input Apparatus*, March 1991.

[Antonelli01] K. Antonelli et al., *U.S. Patent 6,259,108: Fingerprint Image Optical Input Apparatus*. October 1998.

[Helot03] J. Helot et al., *U.S. Patent 6,504,945: System For Promoting Correct Finger Placement In A Fingerprint Reader*. July 1999.

[Nakamura05] Y. Nakamura et al., *U.S. Patent 6,856,695: Portable Information Terminal Device Using A Single Imaging Element To Perform Identity Verification*. November

2001.

[OGorman02] L. O'Gorman et al., *U.S. Patent Application Publication 2002/0172402:*  
*Enclosure And Biometric Data Collection For Fingerprint Sensor Device*, May

2001.

[Tadashi92] A. Tadashi, *Japanese Patent Application Publication No. 04-088586*, Publication  
Date: March 1992.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Siangchin whose telephone number is (703)305-7569. The examiner can normally be reached on 9:00am - 5:30pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703)308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

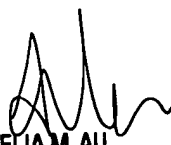
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Kevin Siangchin



Examiner  
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